

## GENETIC FOOD FEARS PROMPT RUSH ON ORGANIC PRODUCE

In the UK, sales of organic food have increased so much in the past year that supermarkets are finding it hard to keep up with demand. Major chains say organic produce has become so popular that it has made the unprecedented shift from niche market to mainstream.

Tesco, one of Britain's largest supermarket chains, reports a 100 per cent growth in sales of organic goods, and is currently sponsoring research at Aberdeen University, Scotland, aimed at helping farmers convert to organic practices.

Supermarkets in Australia are also getting in on the act, with Coles and Woolworths trialling ranges of organic produce—with overwhelming results.

Scott Kinnear, chair of the Organic Federation of Australia, claims that the European organic food market alone is now worth around A\$6 billion per year and growing.

(Sources: Daily Telegraph, 7 Jan 1999; Independent on Sunday, 10 Jan 1999, London; The Australian, 2 Feb 1999)

## MICROCHIP IMPLANTS TO REPLACE PILLS & POTIONS

A silicon microchip could one day replace painful injections, difficult-to-swallow pills and foul-tasting medicines.



Instead of packing it with data, scientists plan to load the tiny chip with drugs. Programmed to release tiny quantities of drugs at precise times, it would then be implanted under the skin, or swallowed if necessary.

The prototype has been developed by Massachusetts Institute of Technology scientist Dr Robert Langer, working with John Santini and Michael Cima. They claim the chip could be used to deliver pain relief or cancer drugs, or used in medical diagnostic tests, in jewellery to emit scents, or in any capacity to deliver one or more chemical compounds in

specific amounts at specified times.

It may even be possible to create a microchip that could be put in television sets to release scents. Scenes of oceans could be matched with salt-air smells or gardens with floral aromas.

The device is the first of its kind enabling the storage of one or more chemicals inside of the microchip with the release of the compounds on demand. A microprocessor, remote control or biosensor can be used as a trigger mechanism.

The researchers say they could reduce the size of the chip to as small as 0.08 inches (2 millimetres), depending on its desired use. There is also the potential for more than a thousand, maybe thousands of reservoirs if the reservoirs are smaller.

Another benefit of the chip is that it's cheap. Dr Langer and his team are making them in a research lab for about \$20 each, but, if produced in larger batches, a chip could cost just a few dollars or less.

(Sources: Reuters; Nature, vol. 397, 28 January 1999)

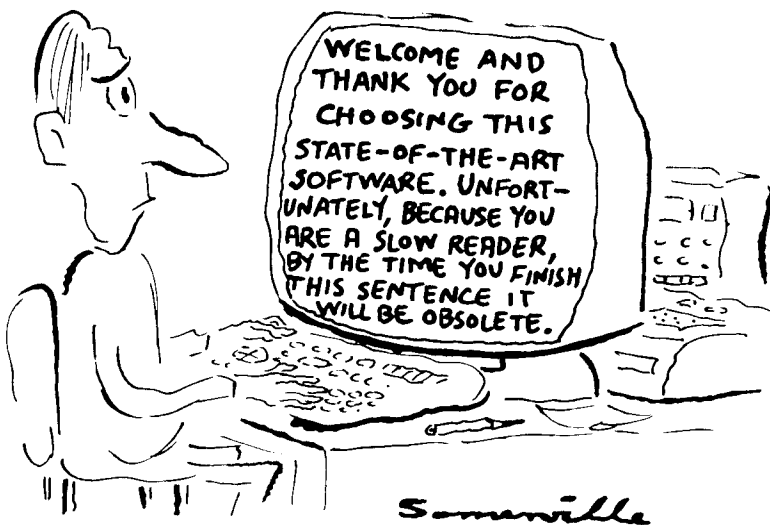
## WEB WARFARE: THE INTERNET VERSUS BIG BROTHER

You will probably not have read much about the collapse, in Paris, of the Multinational Agreement on Investment, or MAI (see article in NEXUS 5/04). That is hardly surprising, as it was one of the most clandestine events of 1998.

Delegates from the 29 richest countries in the world, treasury officials, bankers and civil servants had been meeting for two years to negotiate what might have been the most far-reaching international agreement this century. But you didn't read or hear much about that either, because they did it more or less in secret.

There were those who had been suspicious of the agreement from the outset. When it was launched in 1995, its sponsors trumpeted it as the final pillar in the globalisation of the world's economy, but to its opponents it was a plot by multinational companies to shake off the controls that democracies might legitimately place upon their activities.

The posting of all this on the Internet, after two years or more of semi-secret negotiations, changed everything. The secrecy which had initially bred only mild



mistrust ignited into widespread opposition. From the United States to India, from Canada to New Zealand and all across Europe, an *ad hoc* coalition of environmentalists, local councils, health workers, human-rights campaigners, trade unionists, aid agencies and church groups began to band together, using the Internet to coordinate their campaigns.

The Internet became the vehicle for protesters to lobby and exchange information across the globe. The MAI started wallowing under sustained attack from all quarters until finally, in 1998, the French Government pulled out of the MAI talks altogether.

Media analysts and Internet observers have unanimously concluded that it was the Internet that facilitated the death of the MAI (in its most recent incarnation).

(Sources: The Independent on Sunday, 10 Jan 1999; Guardian Weekly, 7 Feb 1999)

## PRIVACY CONCERNS OVER EUROPOL'S COMPUTER

The new year opens the door not only for the euro but also for Europol, the fledgling 15-nation police intelligence agency that will use the first part of its new computer system to fight crime across the European Union.

The Europol Computer System, or TECS, is a policeman's dream—and a nightmare for civil rights activists. At present, the computer is defined as an interim system but will soon provide the police agency with full analytical data not only on convicted criminals and suspects but also victims, potential victims, those with suspected criminal contacts and probably even witnesses. Data on health and race can also be stored.

Eventually, TECS will be expanded to provide a more general databank with a capacity to store information on about a million or more people.

The German Government—especially the Green Party—has become very nervous about its introduction. Germany has the strictest data protection laws in Europe, and the question of access to the stored information is particularly sensitive. The suggestion of storing information on witnesses is particularly controversial.

At first, only Europol officials—nationally delegated detectives who work in The Hague—will be able to use the database. When the system expands, however, policemen from every European

country will be able to tap into the Europol databank. A French policeman could thus discover private aspects of a German person's life and behave more freely with that information than a German policeman.

The arrest of a Belgian policeman on suspicion of selling information from the Schengen information system to the Mafia sent alarm bells ringing in Germany.

Europol officers cannot, as yet, function in the manner of a federal police force, and the head of Europol is a well-respected German detective. However, the data question is likely to become a flashpoint.

(Source: by Roger Boyes in Bonn; The Sunday Times, London, 3 January 1999)

## THE TEN WORST CORPORATIONS OF 1998

According to the outspoken journal *Multinational Monitor*, these were the 10 worst corporations of 1998:

- **Chevron**, for continuing to do business with a brutal dictatorship in Nigeria and for alleged complicity in the killing of civilian protesters.

- **Coca-Cola**, for hooking children on sugar and soda water. Today in the USA, teenage boys and girls drink twice as much soda pop as milk, whereas 20 years ago they drank nearly twice as much milk as soda.

- **General Motors**, for becoming an integral part of the Nazi war machine and then, years later when documented proof emerges, denying it.

- **Loral** and its chief executive Bernard

Schwartz, for dumping US\$2.2 million into Clinton/Gore and Democratic Party coffers. The Clinton administration responded by approving a human rights waiver to clear the way for technology transfers to China.

- **Mobil**, for supporting the Indonesian military in crushing an indigenous uprising in Aceh province and allegedly allowing the military to use company machinery to dig mass graves.

- **Monsanto**, for introducing genetically engineered foods into the foodstream without adequate safety testing and without labelling, thus exposing consumers to unknown risks.

- **Royal Caribbean Cruise Lines**, for pleading guilty to felony crimes for dumping oil in the Atlantic Ocean and then lying to the Coast Guard about it.

- **Unocal**, for engaging in numerous acts of pollution and law violations to such a degree that citizens in California petitioned the state's attorney-general to revoke the company's charter.

- **Wal-Mart**, for crushing small-town America, for paying low, low wages (a huge percentage of Wal-Mart workers are eligible for food stamps), for using Asian child labour and for homogenising the population.

- **Warner-Lambert**, for marketing a hazardous diabetes drug, Rezulin, which has been linked to at least 33 deaths due to liver injuries.

(Source: *Multinational Monitor*, [www.essential.org/monitor/monitor.html](http://www.essential.org/monitor/monitor.html))

## LIFE WITHOUT COMPUTERS



## BRITAIN PLANS TO DUMP NUCLEAR WASTE IN AUSTRALIA

The United Kingdom is undertaking a £6 billion project to dump nuclear waste in Australia.

British Nuclear Fuels (BNFL), which is wholly owned by the UK Government, has already spent millions of pounds investigating a scheme to build the world's biggest nuclear waste repository in the outback.

Britain has the world's second-largest stockpile of nuclear waste from power stations, and considers outback Australia to be an ideal site for the deep disposal of contaminated waste.

Given Britain's track record (or lack thereof) of honesty and integrity in dealing with problems arising from previous nuclear and atomic projects in Australia, this move will be even less popular than breaking wind in an elevator!

(Source: *The Guardian Weekly, London, 28 February 1999*)

## LOST CONTINENT FOUND!

Scientists have discovered a continent that has risen above the Indian Ocean at least three times over the last 80 million years. The submerged continent is situated approximately 4,000 kilometres (2,485 miles) southwest of Australia.

The discovery of events and conditions that caused the raising of the Earth's crust above sea-level is so unexpected that theories on how continents form will have to be revised yet again.

Geologists aboard the drilling ship *Joides Resolution*, which is working on the international Ocean Drilling Program, have found that two submerged features, the Kerguelen Plateau and Broken Ridge, now about 2,000 metres below the surface, were once joined. Together they formed a continental shelf with an area of two million square kilometres.



By studying recovered plant remains and fossilised marine plankton, the researchers have identified three periods during which the crust rose above sea level: 110 million years ago, 85 million years ago, and 35 million years ago.

(Source: *New Scientist, 20 February 1999*)

## THREATS TO HEALTH CARE FREEDOM IN NEW ZEALAND

Three-year-old Liam Williams-Holloway is in hiding, and half the New Zealand police force is on the lookout for him. His 'crime' is that he has parents who care.

Liam's parents have refused to continue with experimental chemotherapy ordered by HealthCare Otago and have gone into hiding, sparking a New Zealand-wide police manhunt which has included raids on alternative health clinics.

Fearing the growing wave of public support, the Family Court has taken out a censorship gag on all news media, prohibiting them from publishing anything concerning Liam or his parents.

A statement issued by Liam's parents on Friday 12 February 1999 reads as follows:

"Given the intense public and media interest, we would like to explain the reasons behind the forcing of our actions. When your child has a medical problem of an unusual type, unless you are skilled you seek a clinical diagnosis. It is at this point that you relinquish control.

"Liam was diagnosed with neuroblastoma in November 1998. Diagnostic procedures were carried out, which indicated one site only, and chemotherapy was initiated. The protocol chosen is still of experimental status. It consisted of seven 10-day cycles of very intensive chemotherapy, with the final administration of chemotherapy to kill bone marrow before a stem cell transplant. [The family explains that Liam's chance of survival was 50 per cent with conventional treatment.]

"After two cycles of chemotherapy and much reading, we wanted to seek alternatives to give Liam the chance of a better quality of life. Meeting with HealthCare Otago, we were reluctantly given three weeks to seek out alternative stuff. Although given this opportunity, we were told that no matter how much progress was made, even if the cancer was in remission, Liam would still be put through the set protocol completely without re-evaluation or compromise.



"Even with the best medical care and various treatment regimes, all our findings have shown that neuroblastoma has an incredibly high recurrence rate which is generally more widespread with amplification. Add to the list highly possible side-effects; for example, low blood count and irreversible renal or kidney damage, high-frequency hearing loss and neurotoxicity.

"We eventually found treatment for Liam and have been pursuing this for three weeks. At this stage, Liam is healthy and happy and the tumour is reducing rapidly. Ultimately we would wish that our choice for non-invasive treatment for Liam be respected and be able to be done in conditions a lot less stressful.

"Given Liam's legal status and the uncompromising approach by HealthCare Otago, we have no option but to remain in hiding and continue his treatment, and our only hope for a happy outcome is to present Liam as a cured boy.

"We feel that we are acting in Liam's best interest and we are grateful to all people giving us their support.

"(signed) Brendan, Trina, Molley and Liam Williams-Holloway"

(Source: E-mails from NZ NEXUS readers)

## DOUBLE MASTECTOMY: THE TROUBLE WITH STATISTICS

Every year, hundreds of western women have both their apparently healthy breasts surgically removed in an effort to ensure they will not contract breast cancer. But even this kind of extreme, "preventive" measure is no guarantee.

Having a double mastectomy can reduce the risk of dying of breast cancer by 90 per cent, according to a study just published in the *New England Journal of Medicine*.

Interestingly, the investigators from the Mayo Clinic derived this figure from "statistical models" and from "the death rate of the patients' sisters", i.e., people who did *not* undergo the operation but *presumably* faced the same cancer risk. They studied 639 women who, during the period 1960 to 1993, had double mastectomies but no breast cancer, and found there were only two deaths, whereas statistics predicted there should have been 20 deaths.

The end result was that 619 women had radical and needless surgery, and the rest of us are no clearer as to what it all means!

(Sources: The Australian, 15 January 1999; Time, 25 January 1999)

## THE PENTIUM III CHIP: YOUR NEW INTERNET ID CARD?

Intel announced on 20 January 1999 that it was planning to include a unique Processor Serial Number (PSN) in every one of its new Pentium III chips. According to Intel, the PSN will be used to identify users in electronic commerce and other net-based applications.

But a growing number of consumers—spearheaded by Junkbusters, a New Jersey-based technology lobby group that has been leading a boycott of the Pentium III chip—believe that the provision of a unique PSN, which can be read remotely by websites and other programs in mass-market computers, would significantly damage their privacy. This number is designed to be used to link users' activities on the Internet for marketing and other purposes.

According to Intel VP Patrick Gelsinger, the PSN will be used to identify users who access Internet websites or chat rooms. The technology will also be used for authentication in e-commerce, which will attach the PSN to a person's real-world identity.

The PSN would likely be collected by many sites, and indexed and accumulated in databases. Unlike "cookies", which are usually different for each website, the PSN will remain the same and cannot be deleted or easily changed.

Because the United States has few legal protections for online privacy, there are no practical limits on what can be collected or used. With PSNs, any software running on a person's PC can obtain the PSN and, if the application is Internet-enabled, can transmit it anywhere. The user may be unaware this has happened. Given the widespread practice of downloading shareware, and the lack of legal protection over personal data and the economic incentives to collect and sell it, widespread abuse seems more than likely.

Gelsinger also told the RSA conference that over 30 companies had already given commitments to Intel that they were planning to use the PSN.



## Threats to Internet Privacy and Security

According to Internet security experts, the PSN will not provide real security because it is poorly designed. Hackers will be able to forge PSNs, thus undercutting potential authentication uses.

Intel announced on 25 January that it is planning to release a software program that would turn the PSN function 'off'. This program will run automatically each time a computer is booted, and turn the PSN off for that session. However, the PSN function will remain in the Pentium III chip and will be available if the program is disabled for any reason. Some of the problems are as follows:

- This software program does not exist yet. According to the *Washington Post*, the program will not become available until months after the first PIII-enabled machines are shipped, and even then it will only work for Windows. Users will be required to access the Intel web page to obtain a copy of the program and install it themselves.

- This approach relies on other companies to install the program for Intel. When the program does become available, Intel will have to ask every computer manufacturer and other computer companies, including Microsoft, to adopt this into their systems. Some of these companies, such as Microsoft, which have an interest in using the PSN for software verification, may refuse to install the program.

- Users will be required to provide the PSN. It is likely that users will be required to disable the PSN privacy protections by many software programs and websites as a condition for access.

- The software program can be tampered with or disabled. Because the privacy protection scheme relies on a software patch that must run each and every time that a user turns on the computer, it is susceptible to tampering by other software programs. According to Intel VP Patrick Gelsinger, many software developers are already planning to use the PSN and would be likely to require that the patch be removed.

(Source: Junkbusters website, [www.bigbrotherinside.com](http://www.bigbrotherinside.com))